

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/002158

## A. CLASSIFICATION OF SUBJECT MATTER

IPC<sup>7</sup>: A61K-31/185; A61P-13/12; A61P-9/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61K-31/185; A61P-13/12; A61P-9/\*

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

Delphion; Canadian Patent Database; Google. Keywords homocysteine, renal, cardiovascular, mesna

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X, O, P	Urquhart et al., The effect of intravenous Mesna (sodium 2-mercaptoethanesulfonic acid) on plasma homocysteine concentrations in hemodialysis patients, <i>Can. J. Clin. Pharmacol.</i> , 01-06-2004, 11, e67 ** see abstract #41 **	1-18
A	WO 01/30352 Wilcox 03-05-2001 ** see "background of the invention" section, esp. p 2 **	
A	House et al., Renal uptake and excretion of homocysteine in rats with acute hyperhomocysteinemia, <i>Kidney International</i> , 1998, 54, 1601-1607 ** see pp. 1605-1606 (section entitled "discussion") **	

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\*  
"A" Special categories of cited documents :  
document defining the general state of the art which is not considered to be of particular relevance  
"E" earlier application or patent but published on or after the international filing date  
"L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
"O" document referring to an oral disclosure, use, exhibition or other means  
"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
"&" document member of the same patent family

Date of the actual completion of the international search

15 March 2005 (15-03-2005)

Date of mailing of the international search report

10 May 2005 (10-05-2005)

Name and mailing address of the ISA/CA  
Canadian Intellectual Property Office  
Place du Portage I, C114 - 1st Floor, Box PCT  
50 Victoria Street  
Gatineau, Quebec K1A 0C9

Facsimile No: 001(819)953-2476

Authorized officer  
Chris Evans (819) 934-2323

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### Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. ☒ Claim Nos. : 1-16, 18

because they relate to subject matter not required to be searched by this Authority, namely :

Claims 1-16 and 18 define methods of treatment of the human or animal body by therapy, which are excluded subject-matter under Rule 39.1(iv), PCT. A search has nevertheless been performed, based on the alleged effects of the defined methods.

2. ☐ Claim Nos. :

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :

3. ☐ Claim Nos. :

because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos. :
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim Nos. :

**Remark on Protest** ☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
A	CA 2,265,926 Khan 08-10-2000 ** entire document **	
A	Smith et al., Pharmacokinetics and pharmacodynamics of Mesna-mediated plasma cysteine depletion, <i>J. Clin. Pharmacol.</i> , 12-2003, 43, 1324-1328 ** see pp. 1327 (section entitled "discussion") **	
T	Mare et al., High performance liquid chromatography analysis of MESNA (2-Mercaptoethane Sulfonate) in biological samples using fluorescence detection, <i>Biomedical Chromatography</i> , 15-09-2004, 19, 80-86 ** see pp. 84-85 (section entitled "discussion") **	

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.  
PCT/CA2004/002158

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
WO 0130352	03-05-2001	AU 0112431 A5	08-05-2001
CA 2265926	08-10-2000	AU 5844799 A1 WO 0061154 A1	14-11-2000 19-10-2000